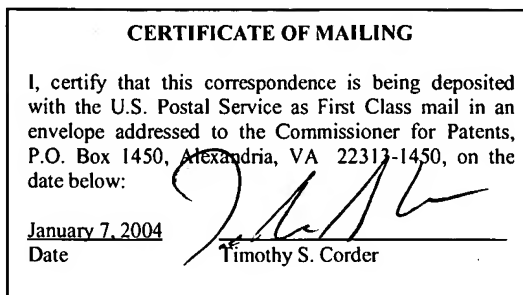




January 7, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450



Re: U.S. Patent Application Serial No. 10/606,279 entitled "KERATIN-SILICONE COPOLYMERS AND INTERPENETRATING NETWORKS (IPN's), METHODS OF PRODUCTION AND METHODS OF USE THEREOF" by Van Dyke, et al.
Atty. Docket No. KER020/4-025US

Sir:

Enclosed for filing in the above-referenced patent application are:

1. Information Disclosure Statement;
2. Form PTO-1449 along with references A1-A44, B1-B48, and C1-C131; and
3. A return postcard to acknowledge receipt of these documents. Please date stamp and mail this postcard.

Should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed materials, the Commissioner is hereby authorized to deduct said fees from VINSON & ELKINS L.L.P. Deposit Account No. 22-0365/KER020/4-025US.

Respectfully submitted,

Timothy S. Corder
Reg. No. 38,414

9282:5588

Enclosures

391286_1.DOC



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Mark E. Van Dyke, et al.

Serial No.: 10/606,279

Filed: June 24, 2003

For: KERATIN-SILICONE COPOLYMERS
AND INTERPENETRATING
NETWORKS (IPN's), METHODS OF
PRODUCTION AND METHODS OF USE
THEREOF

Group Art Unit: 1772

Examiner: Unknown

Atty. Dkt. No.: KER020/4-026US

Confirmation No.: 3334

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this document is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:	
January 7, 2004 Date	 Timothy S. Corder

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

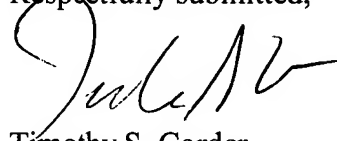
Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on the attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Vinson & Elkins L.L.P. Deposit Account No. 22-0365/KER020/4-025US.

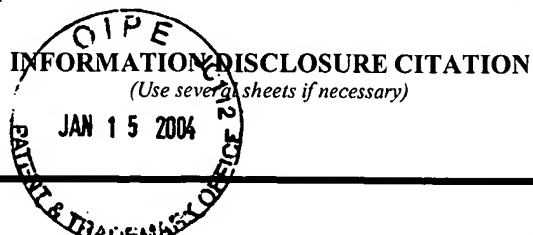
Respectfully submitted,



Timothy S. Corder
Reg. No. 38,414
Agent for Applicant

Vinson & Elkins L.L.P.
2300 First City Tower
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Houston, Texas 77002-6760
512-542-8446

Date: January 7, 2004



Docket Number (Optional) KER020/4-025US		Application Number 10/606,279
Applicant(s) Mark E. Van Dyke et al.		
Filing Date June 24, 2003	Group Art Unit 1772	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	4,135,942	01/23/79	Kikkawa	106	155	
	A2	4,357,274	11/02/82	Werner	260	123	
	A3	4,369,037	01/18/83	Matsunaga et al.	8	127	
	A4	4,439,417	03/27/84	Matsunaga et al.	424	70	
	A5	4,495,173	01/22/85	Matsunaga et al.	424	70	
	A6	4,570,629	02/18/86	Widra	128	156	
	A7	4,751,074	06/14/88	Matsunaga et al.	424	70	
	A8	4,839,168	06/13/89	Abe et al.	424	74	
	A9	4,895,722	01/23/90	Abe et al.	424	71	
	A10	4,959,213	09/25/90	Brod et al.	514	21	
	A11	5,047,249	09/10/91	Rothman et al.	424	543	

FOREIGN PATENT DOCUMENTS

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	B1	EP0454600A	10/30/91	Europe			√	
	B2	JP5285374	11/02/93	Japan			Abstract	
	B3	JP5285375	11/02/93	Japan			Abstract	
	B4	JP56129035	10/08/81	Japan			Abstract	
	B5	JP6116300	04/26/94	Japan			Abstract	

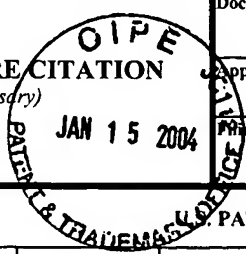
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

C1	Southwest Research Institute Annual Report, 17-18, 21, 1997
C2	Technology Today, 16(3):9, 1995

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional)		Application Number	
				KER020/4-025US		10/606,279	
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				Mark E. Van Dyke et al.			
				Filing Date		Group Art Unit	
				June 24, 2003		1772	



PATENT DOCUMENTS							
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	A12	5,134,031	07/28/92	Kagechi et al.	428	373	
	A13	5,258,043	11/02/93	Stone	623	66	
	A14	5,276,138	01/04/94	Yamada et al.	530	357	
	A15	5,358,935	10/25/94	Smith et al.	514	21	
	A16	5,712,252	01/27/98	Smith	514	21	
	A17	5,763,583	06/09/98	Arai et al.	530	353	
	A18	5,792,090	08/11/98	Ladin	602	48	
	A19	5,824,331	10/20/98	Usala	424	424	
	A20	5,932,552	08/03/99	Blanchard et al.	514	21	
	A21	5,948,432	09/07/99	Timmons et al.	424	443	
	A22	5,679,377	10/21/97	Bernstein et al.	424	491	

FOREIGN PATENT DOCUMENTS								
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	B7	JP6336499	12/06/94	Japan			Abstract	
	B8	RU2106154C1	03/10/98	Russia			Abstract	
	B9	JP1197423	08/09/89	Japan			Abstract	
	B10	JP3011099	01/18/91	Japan			Abstract	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	C3 Yamauchi et al., "Cultivation of fibroblast cells on keratin-coated substrata," Polymers of Tissue Engineering, 329-40 1998
	C4 Atala et al., "Injectable alginate seeded with chondrocytes as a potential treatment for vesicoureteral reflux," The Journal of Urology, Vol. 150, 745-47, August 1993

EXAMINER	DATE CONSIDERED
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INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)		Docket Number (Optional)		Application Number	
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		Applicant(s)			
		Mark E. Van Dyke et al.			
		Filing Date		Group Art Unit	
		June 24, 2003		1772	

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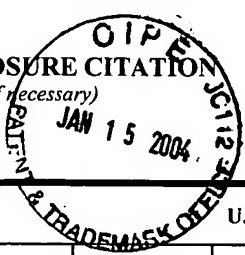
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
C5	Bellamkonda et al., "Hydrogel-based three-dimensional matrix for neural cells," <i>Journal of Biomedical Materials Research</i> , Vol. 29, 663-71 (1995)	
C6	Cao et al., "Tissue-engineered nipple reconstruction," <i>Plastic and Reconstructive Surgery</i> , Vol. 102, No. 7, 2293-98, December 1998	
C7	de Chalain et al., "Bioengineering of elastic cartilage with aggregated porcine and human auricular chondrocytes and hydrogels containing alginate, collagen, and k-elastin," <i>J. Biomed. Matter Res.</i> , 280-88, 1999	
C8	Dillon et al., "The influence of physical structure and charge on neurite extension in a 3D hydrogel scaffold," <i>J. Bioimater. Sci. Polymer Edn.</i> , Vol. 9, No. 10, 1049-69 (1998)	
C9	Kang et al., "Fabrication of porous gelatin scaffolds for tissue engineering," <i>Biomaterials</i> , 20, 1339-44, 1999	
C10	Plant et al., "Axonal growth within poly (2-hydroxyethyl methacrylate) sponges infiltrated with Schwann cells and implanted into the lesioned rat optic tract," <i>Brain Research</i> , 671, 119-130, 1995	
C11	Santin et al., "Synthesis and characterization of a new interpenetrated poly (2-hydroxyethylmethacrylate)-gelatin composite polymer," <i>Biomaterials</i> , 17, 1459-67 (1996)	
C12	Sechriest et al., "GAG-augmented polysaccharide hydrogel: A novel biocompatible and biodegradable material to support chondrogenesis," <i>J. Biomed. Matter. Res.</i> , 535-41, 2000	
C13	Yu et al., "A laminin and nerve growth factor-laden three-dimensional scaffold for enhanced neurite extension," <i>Tissue Engineering</i> , Volume 5, Number 4, 1999	

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	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
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	B11	JP3294297	12/25/91	Japan			Abstract	
	B12	JP4312534	11/04/92	Japan			Abstract	
	B13	JP57109797	07/08/82	Japan			Abstract	

EXAMINER	DATE CONSIDERED

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INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional)		Application Number	
				KER020/4-025US		10/606,279	
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				Arlene J. Siller Jackson, et al.			
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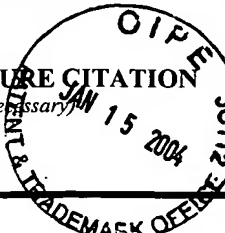
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	A23	922,692	05/25/09	Goldsmith			
	A24	926,999	07/06/09	Neuberg			
	A25	960,914	06/07/10	Heinemann			
	A26	3,642,498	02/15/72	Anker	99	166	
	A27	4,423,032	12/27/83	Abe et al.	424	70	
	A28	4,895,722	01/23/90	Abe et al.	424	71	
	A29	5,047,249	09/10/91	Rothman et al.	424	543	
	A30	1,214,299	01/30/17	Grosvenor et al.			
	A31	2,434,688	11/03/42	Evans	18	47.5	
	A32	2,445,028	07/13/48	Jones et al.	106	155	

FOREIGN PATENT DOCUMENTS								
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	B14	WO 91/02538	03/07/91	PCT				
	B15	EP 0468797 B1	12/20/95	Europe			X	
	B16	WO 98/08550	03/05/98	PCT				
	B17	JP 04091138 A2	03/24/92	Japan			Abstract	

OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>	
C14	Thomas et al., "Isolation of microfibrillar proteins of wool in disulfide form," Melliand Textiberichte, 65(3):20809, 1984
C15	van de Löcht, "Reconstitution of microfibrils from wool and filaments from epidermis proteins," Melliand Textiberichte, 10:780-6, 1987

EXAMINER	DATE CONSIDERED

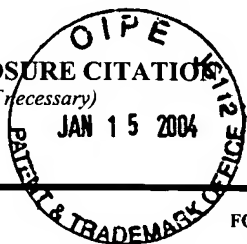
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>					Docket Number (Optional)		Application Number	
			KER020/4-025US		10/606,279			
			Applicant(s)		Group Art Unit			
			Mark E. Van Dyke, et al.					
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	A34	2,814,851	12/03/57	Hervey	28	82		
	A35	3,033,755	05/08/62	Jacobi et al.	167	90		
	A36	3,655,416	04/11/72	Vinson et al.	106	155		
	A37	4,178,361	12/11/79	Cohen et al.	424	22		
	A38	5,320,796	06/14/94	Harashima et al.	264	349		
	A39	5,634,945	06/03/97	Pernia et al.	623	11		
	A40	5,679,819	10/21/97	Jones et al.	556	418		
	A41	6,110,487	08/29/00	Timmons et al.	424	443		
	A42	6,270,791	08/07/01	Van Dyke et al.	424	443		
	A43	6,274,163	08/14/01	Blanchard et al.	424	443		
	A44	5,300,285	04/05/94	Halloran et al.	424	71		
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	B18	SHO 54-124043	02/06/82	Japan			X	
	B19	S55-187190	12/26/80	Japan			X	
	B20	1988-202582	08/13/88	Japan			X	
	B21	HEI 4-189833	07/08/92	Japan			X	
	B22	1992-174659	05/22/92	Japan			X	
EXAMINER				DATE CONSIDERED				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

INFORMATION DISCLOSURE CITATIONS

(Use several sheets if necessary)

JAN 15 2004



Docket Number (Optional)

KER020/4-025US

Application Number

10/606,279

Applicant(s)

Mark E. Van Dyke et al.

Filing Date

June 24, 2003

Group Art Unit

1772

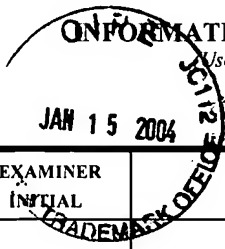
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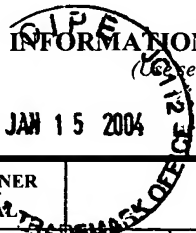
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	B26	JP1998291999A	11/04/98	Japan			X	
	B27	JP1993285374A	11/02/93	Japan			X	
	B28	JP1993285375A	11/02/93	Japan			X	
	B29	63-47470	09/22/88	Japan				X
	B30	62-1731	01/14/87	Japan				X
	B31	2001-114647	04/24/01	Japan				X
	B32	8-157342	06/18/96	Japan				X
	B33	60-220068	11/02/85	Japan				X
	B34	3-223207	10/02/91	Japan				X
	B35	6-240579	08/30/94	Japan				X
	B36	2-212410	08/23/90	Japan				X
	B37	2002-138022	05/14/02	Japan				X
	B38	11-240822	09/07/99	Japan				X
	B39	SHO 60-220068	11/02/85	Japan			X	
	B40	WO 03/011894 A1	02/13/03	PCT				
	B41	WO 03/018673 A1	03/06/03	PCT				
	B42	531,446	01/03/41	UK			X	
	B43	04091138 A	03/24/92	Japan			Abstract	
	B44	JP 2001087754	04/0301	Japan			Abstract	
	B45	0 454 600 A1	10/30/91	Europe			Abstract	
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	B47	EP 0540357	07/24/96	Europe				
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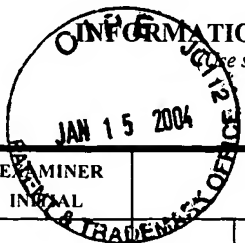
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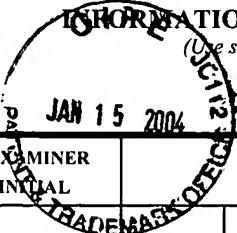
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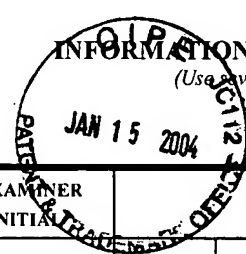
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		Applicant(s)		Group Art Unit
		Mark E. Van Dyke et al.		1772
		Filing Date		
		June 24, 2003		
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	C16	Yoshioka et al., "Cosmetic base," unexamined Japanese Patent Application No. 3-223207, October 2, 1991		
	C17	Yoshioka et al., "Water-soluble hair dressing agent," unexamined Japanese Patent Application No. 8-157342, June 18, 1996		
	C18	Hyuku et al., "Novel amino acid silicone polymer, production thereof, cosmetic particles surface treated with the polymer, and cosmetic containing said particles," unexamined Japanese Patent Application No. 2001-114647, April 24, 2001		
	C19	Ito et al., "Biocompatibility of denatured wool keratin," 39:4, 249-256, April 1982		
	C20	Yamauchi, "The development of keratin: characteristics of polymer films," <i>Fragrance J</i> , 21(5), 62-7, 1993		
	C21	Sauk et al., "Reconstitution of cytokeratin filaments in vitro: further evidence for the role of nonhelical peptides in filament assembly," <i>The Journal of Cell Biology</i> , 99, 1590-1597, November 1984		
	C22	Weber et al., "The structural relation between intermediate filament proteins in living cells and the α -keratins of sheep wool," <i>The EMBO Journal</i> , 1:10, 1155-1160, 1982		
	C23	Hanukoglu et al., "The cDNA sequence of a human epidermal keratin: divergence of sequence but conservation of structure among intermediate filament proteins," <i>Cell</i> , 31, 243-252, November 1982		
	C24	Fraser et al., "Intermediate filaments in α -keratins," <i>Proc. Natl. Acad. Sci. USA</i> , 83, 1179-1183, March 1986		
	C25	Jones, "Studies on microfibrils from α -keratin," <i>Biochimica et Biophysica Acta</i> , 446, 515-524, Received April 5th, 1976		
	C26	Zackroff, et al., "In vitro assembly of intermediate filaments from baby hamster kidney (BHK-21) cells," <i>Proc. Natl. Acad. Sci. USA</i> , 76:12, 6226-6230, December 1979		
	C27	Mack, et al., "Solid-state NMR studies of the dynamics and structure of mouse keratin intermediate filaments," <i>Biochemistry</i> , 27, 5418-5426, 1988		
EXAMINER		DATE CONSIDERED		
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>				

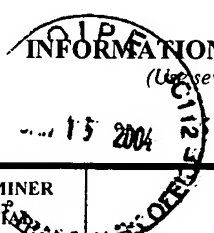
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		Applicant(s) Mark E. Van Dyke et al.		
		Filing Date	Group Art Unit	
		June 24, 2003	1772	
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	C28	Skerrow, et al., "Epidermal α -keratin is neutral-buffer-soluble and forms intermediate filaments under physiological conditions in vitro," <i>Biochimica et Biophysica Acta</i> , 915, 125-131, 1987		
	C29	Kvedar, et al., "Cytokeratins of the bovine hoof: classification and studies on expression," <i>Biochimica et Biophysica Acta</i> , 884, 462-473, 1986		
	C30	Moll, et al., "The catalog of human cytokeratins: patterns of expression in normal epithelia, tumors and cultured cells," <i>Cell</i> , 31, 11-24, November 1982		
	C31	Iwatsuki, et al., "Comparative studies on naturally occurring antikeratin antibodies in human sera," <i>The Journal of Investigative Dermatology</i> , 87:2, 179-184, August 1986		
	C32	Lambré, et al., "An enzyme immunoassay for auto-antibodies to keratin in normal human serum and in pleural fluids from patients with various malignant or non-malignant lung diseases," <i>J. Clin. Lab. Immunol.</i> , 20, 171-176, 1986		
	C33	Stokes, et al., "Passage of water and electrolytes through natural and artificial keratin membranes," <i>Desalination</i> , 42, 321-328, 1982		
	C34	Dedeurwaerder, et al., "Selective extraction of a protein fraction from wool keratin," <i>Nature</i> , 265, 48-49 and 274-276, January 20, 1977		
	C35	Brunner, et al., "Fractionation of tyrosine-rich proteins from oxidized wool by ion-exchange chromatography and preparative electrophoresis," <i>Eur. J. Biochem.</i> , 32, 350-355, 1973		
	C36	Mies, et al., "Chromatographic and electrophoretic investigations of the properties of unprotected low-sulphur wool kerateins," <i>Journal of Chromatography</i> , 405, 365-370, 1987		
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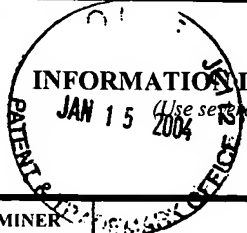
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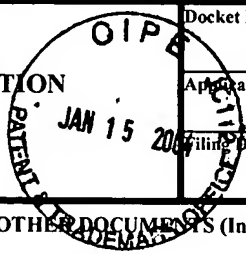
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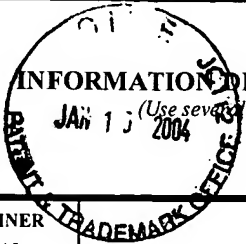
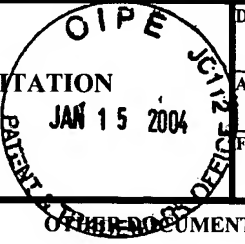
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